UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,771	01/22/2004	Said Al-Hallaj	IIT-187	3107

42419 7590 08/31/2007
PAULEY PETERSEN & ERICKSON
2800 WEST HIGGINS ROAD
SUITE 365
HOFFMAN ESTATES, IL 60195

EXAMINER	
WANG, EUGENIA	

ART UNIT	PAPER NUMBER
1745	

MAIL DATE	DELIVERY MODE
08/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/762,771	AL-HALLAJ ET AL.	
	Examiner	Art Unit	
	Eugenia Wang	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,21-23 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13, 21-23, and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the amendment filed Mar 12, 2007:

a. Claims 14-20 and 24-26 have been cancelled as per Applicant's wishes. Claims 29 and 30 have been added. Claims 1-13, 21-23, and 27-29 are pending.

b. The previous objections to the drawings have been withdrawn in light of the amendment.

c. The previous objection to the specification has been withdrawn in light of the amendment.

d. The previous claim objections have been withdrawn in light of the amendment.

e. A new rejection is made in light of the amendments, thus this action is final.

Drawings

2. The drawings submitted on March 12, 2007 are accepted.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-23 and 27-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention

Claim 21 recites the limitation "means for." There is insufficient antecedent basis for this limitation in the claim. The specification does not provide the means for. Absent the definition of the antecedent, Applicant has not met the requirement for invoking 112(6). Examiner invites Applicant to clarify the record as to whether or not 112(6) is being invoked. Since claims 22, 23, and 27-30 are dependent on claim 21, they are rejected for the same reason.

The terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." In the situation in which the written description only implicitly or inherently sets forth the structure, materials, or acts corresponding to a means- (or step-) plus-function, and the examiner concludes that one skilled in the art would recognize what structure, materials, or acts perform the function recited in a means- (or step-) plus-function, the examiner should either: (A) have the applicant clarify the record by amending the written description such that it expressly recites what structure, materials, or acts perform the function recited in the claim element; or (B) state on the record what structure, materials, or acts perform the function recited in the means- (or step-) plus-function limitation. Even if the disclosure implicitly sets forth the structure, materials, or acts corresponding to a means- (or step-) plus-function claim element in compliance with 35 U.S.C. 112, first and second paragraphs, the USPTO may still require the applicant to amend the specification pursuant to 37 CFR 1.75(d) and MPEP § 608.01(o) to explicitly state, with reference to the terms and phrases of the claim element, what structure, materials, or acts perform

the function recited in the claim element. See 35 U.S.C. 112, sixth paragraph ("An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." (emphasis added)); see also B. Braun Medical, 124 F.3d at 1424, 43 USPQ2d at 1900 (holding that "pursuant to this provision [35 U.S.C. 112, sixth paragraph], structure disclosed in the specification is corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the quid pro quo for the convenience of employing 112, paragraph 6."); Medical Instrumentation and Diagnostic Corp. v. Elekta AB, 344 F.3d 1205, 1218, 68 USPQ2d 1263, 1268 (Fed. Cir. 2003)(Although one of skill in the art would have been able to write a software program for digital to digital conversion, such software did not fall within the scope of "means for converting" images as claimed because nothing in the specification or prosecution history clearly linked or associated such software with the function of converting images into a selected format.); Wolfensperger, 302 F.2d at 955, 133 USPQ at 542 (just because the disclosure provides support for a claim element does not mean that the USPTO cannot enforce its requirement that the terms and phrases used in the claims find clear support or antecedent basis in the written description).

See also Biomedino LLC v. Waters Technologies Corp., 83 USPQ2d 1118.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-6, 11, 12, 21-23, 27, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over "A new water and power combination: Vacuum vapor

compression seawater distillation and natural gas fuel cells" (Campbell et al.) in view of US 2003/0170516 (Prerad).

As to claims 1, 2, 3 21, 29, and 30 Campbell et al. teach an alternative to conventional desalination systems that are dependent on abundant oil; in their case they have designed an ultra efficient vacuum vapor compression distillation (VVCD) system for the production of fresh water from seawater (seawater as applied to claim 2 and VVCD as applied to claim 3) (p 423, lines 2-9). Additionally, this system is ideal with coupling with a variety of alternative energy sources, especially fuel cells, because they not only produce electricity, but they also produce waste heat in the form of hot water and air that can be used to increase the efficiency of the integrated system (p 423, lines 9-15). As can be seen by figure 1, the TEM (total energy module) fuel cell system provides power (DC) to the VVCD system. Additionally, freshwater and brine outputs indicate a successful desalination. Running the system as previously described also performs the method for generating electricity and desalinating salinous water, which comprises of the steps generating electricity with a fuel cell and powering the desalination system with electricity from the fuel cell to produce fresh water from the salinous water, as specified by claim 1. Additionally, Campbell et al. teach the use of grids in order to provide backup power (p426-427, sections titled *Grid connection or grid independence, Single units, Multiple units*).

Campbell et al. does not specifically teach that (a) electricity is provided to an electrical grid during peak times of consumer electricity demand and the amount of electricity is increased to the desalination system during times other than peak

consumer electricity demand or (as required by claims 1, 29, and 30) or that there is a means for directing the electricity to an electrical grid and the desalination system (as required by claim 21).

Prerad teaches of converting electrical energy during off-peak periods of low demand to hydrogen and oxygen that are stored for later conversion back into electrical energy during peak periods of high demand (para 0002). Furthermore, such power is directed through a grid [97] (fig. 5; para 0023). Although Prerad's off-peak power is being directed to an electrolyzer, it teaches a general concept that one of ordinary skill in the art would be able to ascertain: directing electricity at peak demand periods to a grid, while directing electricity at off-peak times to an energy consuming device that produces needed materials (in Prerad's case, it is hydrogen and oxygen, while in Campbell et al.'s case, it is water). The motivation for providing a system that functions in such a manner (as required by claims 1, 21, 29, and 30) is to efficiently use the energy generated by a fuel cell system in order to reach consumer demand. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to provide the system of Prerad and its subsequent operations in order to more efficiently meet the electrical demand of consumers at a peak time.

As to claim 4-6, Campbell et al. teach that fuel cells have two by-products: hot water and thermal energy. In Campbell et al.'s combined fuel cell desalination system, the hot water (a form of thermal exhaust emitted from the fuel cell) is used to heat the incoming feed seawater, while the thermal energy is used to reduce radiant losses from the distillation system (p 424, lines 30-31). This heated water is then used to produce

the fresh water. See figure 1 for further details. Additionally the seawater is heated by the hot water via a heat exchanger, as the thermodynamic process starts with the seawater coming in contact with a heat exchanger (as applied to claim 5) (p 430, lines 28-29, figure 2). Part of the seawater is turned into saturated vapor, which enters the compressor; afterwards the vapor is sent into the condenser, where it is condensed into liquid freshwater (as applied to claim 6) (p 431, lines 2-7).

As to claim 22, Campbell et al. mentions proton-exchange membrane fuel cells and phosphoric acid fuel cells for their uses in stationary/vehicular and propulsion system power generation, respectively (p 441, lines 4-10).

As to claim 23, Campbell et al. teach a combined fuel cell desalination system where the hot water is used to heat the incoming feed seawater, while the thermal energy is used to reduce radiant losses from the distillation system (p 424, lines 30-31). This heated water is then used to produce the fresh water. See figure 1 for further details. Additionally the seawater is heated by the hot water via a heat exchanger, as the thermodynamic process starts with the seawater coming in contact with a heat exchanger (as applied to claim 5) (p 430, lines 28-29, figure 2). Part of the seawater is turned into saturated vapor, which enters the compressor; afterwards the vapor is sent into the condenser, where it is condensed into liquid freshwater (as applied to claim 6) (p 431, lines 2-7).

Regarding claims 11 12 and 27, Campbell et al. teach a desalination system that is powered by a fuel cell (as applied to claim 12). Additionally, Campbell et al. mentions

that the technology most competitive with VVCD is reverse osmosis (RO) and that the costs of RO have steadily declined over the past three decades (p 440, lines 1-4).

The difference between Campbell et al. and claims 11 and 27 is that the heated salinous water (as produced in claim 5 with respect to claim 11) is not being delivered into a reverse osmosis system, which acts as the desalination system. However, as noted above, a RO system can be used for desalination (p 440, lines 1-4). The motivation for using the mentioned reverse osmosis system is the fact that RO (1) has become more economical with recent research and (2) requires a small amount of maintenance. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify Campbell et al.'s system by using reverse osmosis rather than VVCD in order to improve economy and to have less mechanical maintenance.

5. Claims 1-6, 11, 12, 21-23, 27, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication 2003/0132097 (Kenet et al.) in view of Prerad.

As to claims 1, 21, 29, and 30, Kenet et al. teach a fuel-cell powered desalination device. This device includes a saltwater input line [12], a desalinator (connected to the input as well as having a fresh water output and a brine output) [10], an energy source for the desalinator, a fuel cell connected to the desalinator for generating electricity [70], and a heat exchanger that transfers heat from the fuel cell to the desalinator [90] (as applied to claim 21) (para 0010-0014). Running the system as previously described also performs the method for generating electricity and desalinating salinous water,

which comprises of the steps generating electricity with a fuel cell and powering the desalination system with electricity from the fuel cell to produce fresh water from the salinous water, as specified by claim 1. It is noted that Kenet et al.'s fuel cell is stationary (para 0017). Furthermore, it can be seen that fuel cell [70] is connected to another energy source [50] (not specifically a grid, but a secondary source of power) via distributor [40] (fig. 1).

Kenet et al. does not specifically teach that (a) electricity is provided to an electrical grid during peak times of consumer electricity demand and the amount of electricity is increased to the desalination system during times other than peak consumer electricity demand or (as required by claims 1, 29, and 30) or that there is a means for directing the electricity to an electrical grid and the desalination system (as required by claim 21).

Prerad teaches of converting electrical energy during off-peak periods of low demand to hydrogen and oxygen that are stored for later conversion back into electrical energy during peak periods of high demand (para 0002). Furthermore, such power is directed through a grid [97] (fig. 5; para 0023). Although Prerad's off-peak power is being directed to an electrolyzer, it teaches a general concept that one of ordinary skill in the art would be able to ascertain: directing electricity at peak demand periods to a grid, while directing electricity at off-peak times to an energy consuming device that produces needed materials (in Prerad's case, it is hydrogen and oxygen, while in Kenet et al.'s case, it is water). The motivation for providing a system that functions in such a manner (as required by claims 1, 21, 28, and 29) is to efficiently use the energy

generated by a fuel cell system in order to reach consumer demand. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to provide the system of Prerad and its subsequent operations in order to more efficiently meet the electrical demand of consumers at a peak time.

As to claim 2, Kenet et al. defines saltwater to include any water with salts or other contaminants that are desirable to be removed, mentioning seawater as a particular example (para 0027, lines 1-4).

Regarding claims 3 and 27, Kenet et al. teaches a reverse osmosis desalinator can be used as the desalinator of choice (para 0016, lines 1-2).

As to claims 4-6, 11, and 12 Kenet et al. teach operating a fuel cell that generates electricity and waste heat, where the waste heat to heat the desalinator (para 0025). Waste heat generated by the fuel cell [70] is used to heat the desalinator [10] using a heat exchanger [90] by either indirectly by preheating the input saltwater [12] (as applied to claims 4 and 5) or directly at the evaporator (para 0037, lines 1-4). As can be seen in figure 1, fresh water [28] leaves the system, after the heated salinous water is further treated. Additionally, there is a vapor line [26] that passes through a heat exchange section [14], which transfers heat from the vapor line [26] to the evaporator [20]. The vapor line [26] thus condenses and is output as fresh water [28] as desalinated water (as applied to claim 6) (para 0031, lines 14-19). As previously mentioned the desalinator could be a reverse osmosis desalinator (as applied to claim 11) (para 0016, lines 1-2). Additionally, the electricity is said to assit in operating the desalinator (as applied to claim 12) (para 0025, lines 3-5).

Regarding claim 22, the fuel cell that is preferred is a phosphoric-acid fuel cell (para 0017, lines 1-3).

As to claim 23 Kenet et al. teach operating a fuel cell that generates electricity and waste heat, where the waste heat to heat the desalinator (para 0025). Waste heat generated by the fuel cell [70] is used to heat the desalinator [10] using a heat exchanger [90] by either indirectly by preheating the input saltwater [12] (as specified by claim 23) or directly at the evaporator (para 0037, lines 1-4). Figure 1 shows a desalination device using a vapor compression desalinator. Salt water enters through the input line [12] and passes through a heat exchange section [14], where it later passes through an evaporator, thus producing desalinated water vapor (para 0031, lines 1-6). The water vapor then passes through a compressor [24], and the vapor line [26] is then condensed to produce desalinated water [28] (para 0031, lines 7-19). The seawater that does not evaporate collects as brine in section [16] paragraph 0032, lines 1-2).

6. Claims 7-10 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Campbell et al. in view of Prerad or Kenet et al. in view of Prerad in further view of US 5346592 (Madani).

The teachings of Campbell et al. in view of Prerad and Kenet et al. in view of Prerad have been discussed above and are incorporated herein, independent of one another.

The differences between the claims 7-10 and 28 and the teachings of Campbell et al. or Kenet et al. (both in view of Prerad) is that neither Campbell et al. nor Kenet et

al. teach a fuel cell/desalination system that uses a multi-stage flash distillation system as its mode of desalination (as applied to claims 7, 10, and 28). Claims 8 and 9 outline procedures used by the flash distillation system.

Madani notes that there are two major desalinations classifications: (1) thermal processes or (2) membrane processes (col 1, lines 18-20). The most widely used thermal process uses multistage flash distillation (MSF) (as applied to claim 6 and 28) (col 1, lines 25-26). The process MSF goes through is heating the salt water into a flash chamber the pressure is lowered allowing salt water to boil at lower temperatures (col 1, lines 27-30). The vapor produced is condensed on tubes that carry fresh, cool salt water into the plant (as applied to claims 8 and 9) (col 1, lines 31-32). In the heat exchange process, steam heats the cooler salt water, while the vapor condenses into desalinated water (as applied to claim 9) (col 1, lines 32-34). (If this desalination system were connected to a fuel cell, then claim 10 would be fulfilled as well. Both Campbell et al. and Kenet et al. teach desalination systems in conjunction with a fuel cell.)

The motivation for using a distillation column is that the distillation column is reusable, which would cut down on machinery costs. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the desalination systems taught by either Campbell et al. or Kenet et al. in order to have a reusable water desalination system, which would cut down on capital costs.

7. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over either Campbell et al. in view of Prerad or Kenet et al. in view Prerad in further view of US Patent Publication 2003/0012997 (Hsu).

The teachings of Campbell et al. in view of Prerad and Kenet et al. in view of Prerad have been discussed above and are herein incorporated.

The difference between either Campbell et al. or Kenet et al. (both in view of Prerad) and claim 13 is that neither teach the use of the exhaust energy to heat the salinous water for a period of time and then generate energy exhaust for additional energy for a second period of time.

Hsu teaches an electrochemical converter [72] (e.g. a fuel cell) that has air [13] and fuel [74] introduced to it, where the reactants power the converter (para 0034). The product is electrical power and high temperature exhaust. The exhaust is introduced to the interior of a pressure vessel [77], which collects and routes the exhaust [79] to the gas turbine expander [80], which converts the thermal energy into rotary energy for subsequent transfer to an electric generator [84] (para 0035, lines 5-10). The electric generator produces electricity (para 0035, lines 10-11). See figure 1 for more details. It is noted that the waste heat can be used for heating as well (a building/facility or a heating component in a boiler) (para 0036, lines7-10; para 0037, lines 1-5). The latter of the two embodiments is similar to Campbell et al.'s and Kenet et al.'s use of the waste heat, which was used to heat the salinous water.

The motivation for using part of the waste heat to generate electricity is to be able to harness that electricity for other uses, for example to power the desalinator or to

power other instruments. The added electricity would be especially useful if the fuel cell did not generate the amount of electricity need to run the desalinator or if the amount thermal exhaust produced exceeded the amount needed for heating the seawater. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of either Campbell et al. or Kenet et al. in order to produce extra electricity for powering the desalinator or for using thermal energy not used to heat the salt water.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugenia Wang whose telephone number is 571-272-4942. The examiner can normally be reached on 7 - 4:30 Mon. - Thurs., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EW

GREGG CANTELMO
PRIMARY EXAMINER

8/30/07